HP LaserJet Pro MFP M176nM177fw vs. top competitors

Devices competing with the HP LaserJet Pro MFP M176n/M177nw can have big shortcomings

Vendor & MFP	Overview	Specifics
HP LaserJet Pro MFP M176n/M177fw $279/$349	Reliable and feature-rich device with best in class print quality, all at an affordable price	• Industry leading print quality - assessed by internal psychometric studies comparing multiple print samples • 3.0" Magic Frame (fw bundle) provides unrivaled ease of use with additional functionality such as web-connectivity and business apps such as Box, Dropbox, GoogleDocs, FlowCM, and more • ePrint provides the most extensive mobile print offering in industry, including Airprint and "Mario" Android in-OS Printing, Wireless Direct, remote printing, and more. • With HP's Smart Install users do not need a CD – simply plug in USB cable and install. • One-touch wireless install makes wireless setup a snap • Auto-On/Auto-Off automatically turns the device on when you need it and off when you don't to save energy. • Most energy efficient device amongst top competitors • Adjust the angle of the control panel to ensure anyone can use the device
Samsung XPress SL-C460FW $399	Cheaply built device that defers extra costs to the user in terms of consumables life	• Samsung included an unlit, 2-line LCD control panel that is incredibly hard to read and is not adjustable to different angles or heights • Samsung's device requires replacement of the fuser and the ITB after only 5K pages. These are not user replaceable, require a service call, and the parts cost approximately half the price of the device, not including service charges • Samsung has added a connector to Google Cloud Print, but they still haven't included web-connectivity or apps to send or receive information independent of a PC or mobile device • Whereas Samsung quotes a monthly duty cycle of 20K pages, the recommended monthly page volume is only 46 color pages! Compare that to up to 950 monthly pages for HP! • Samsung's print quality out of the box is very poor. Moreover, users are expected to remove and shake the cartridges to uniformly distribute toner. • Samsung consumes over 2X the energy of HP (79.3 vs 37.2 kWh/yr)
Konica Minolta magicolor 1690Mf $379	Old device with poor ease of use and worst energy consumption amongst top competitors	• The Konica Minolta has more replacement parts than toner, users only have to replace imaging drum for HP. • The Konica Minolta laser scanner window is directly under toner carousel which gets contaminated and must be manually cleaned • Users must remove the sensitive OPC drum to clear paper jams, exposing it to possible damage • Consumes 5X more energy annually than HP (187.9 kWh vs. 37.2 kWh) • The Konica Minolta magicolor 1690MF has a 32% slower first-page-out time from energy save mode – 37 seconds vs. 28 seconds for HP
Dell C1765nf/nfw $369/$399 Xerox WorkCentre 6015NI $INA	These devices share the same Fuji-Xerox engine. They support fewere features yet consume more energy while emitting more noise.	• The imaging system of Xerox/Fuji-Xerox devices is prone to inconsistent toner density and mottled images. Because the OPC drum is irreplaceable, image quality tends to degrade over the life of the product. • Users are expected to maintain print quality by manually cleaning all 4 LED scanner windows and the Color Toner Density Sensor • Users must adjust the BTR charge and fuser temperature using a method of trial and error to maintain proper print quality • These devices only support paper up to 43 lb bond, compared to 58 lb bond for HP • With less than half the processor speed and no support for advanced PDLs, these devices will be slower processing complex jobs • The ADF of these devices only holds 15 originals; vs 50 pgs for HP • No support for web-connectivity, cloud connections, or business apps • Despite claiming low noise and energy consumption with an LED based design, these devices are louder (51 vs 49 db; based on Dell) and consume more energy (50.4 vs 37.2 kWh/yr; based on Dell)

Specifications

		HP	Samsung	Konica Minolta	Dell	Xerox
		HP Color LaserJet Pro MFP M176n/M177fw	XPress C460FW	magicolor 1690MF	C1765nf/**nfw**	WorkCentre 6015NI
OEM	Engine Supplier	Canon	Samsung	Konica Minolta	Fuji-Xerox	Fuji-Xerox
	Technology	Laser	Laser	Laser	LED	LED
Cost	Estimated Street Price (US$)[1]	$279/$349	$399	$379	$369/**$399**	$INA
	Black/Color CPP (US$)[1] - Toner Plus Consumables	$.042/$0.219	$0.045/$0.234	$0.033/$.216 Std $0.033/$.171 HC	$0.071/$0.311 Std $0.035/$0.185 HC	$0.035/$0.215
Performance	Max Print Speed - Black/Color Ltr (ppm)[2]	Up to 17/4	Up to 19 / 4	Up to 20 / 5	Up to 15/12	15/12
	Scan Speed – Simplex Ltr Black/Color (ppm)[2]	NA **7.5/5.5**	INA/4	10/3.3	INA	INA
	FPO from Ready - Black/Color (Sec)	As fast as 16/27.5	As fast as 14/26	As fast as 14/23	As fast as 16/22	14/17
	FPO from Energy-saving Mode - Black/Color (Sec)[3]	as fast as 28 sec	25.4	37	INA	INA
	Print Resolution - Max/Best Print Quality (dpi)	600 x 600 dpi (HP ImageREt 2400)	2400 x 600	1200 x 1200	600x600 (1200 dpi quality)	1200x2400
	Scan Optical Resolution (dpi)	1200x1200 optical	600x600 optical/ 4800x4800	600x600/ 4800x4800	1200x1200/ 4800x4800	1200x1200
	Processor (MHz)	600	533 MHz dual	INA	295	295
	Memory - Std/Max (MB)	128	128	128	128	128
	Noise - Operating/Idle (dB)	49/inaudible	48/INA	52/32	51/25	INA
	Monthly Duty Cycle/RMPV (pgs)	20K/250-950	20K/46 pgs color or 140 pgs B&W	35K/INA	30K/350-1000	20K/INA
Media Handling	Input Capacity - Std/Max (Sheets)	150/150	150/150	200/700	160/160	160/160
	Input Capacity - MP Tray (Sheets)	NA	NA	NA	10	10
	ADF/Capacity (Originals)	NA/**35**	40	35	15	15
	Output Capacity (Sheets)	50	50	100	100	100
	Automatic Duplex	No	No	Opt ($99)	N	N
	Media Sizes Supported - Min/Max (in)	3x5-8.5x14	3x6 - 8.5x14	3.6x7.24 – 8.5x14	5.5x5.5 – 8.5x14	3x5-8.5x14
	Media Weights Supported - Min/Max Std Tray (Lb. Bond)	16 to 58	16 to 58	16 to 53	16 to 43	16 to 43
	Media Weights Supported - Min/Max MP Tray (Lb. Bond)	NA	NA	NA	16 to 43	16 to 43
Supplies	Toner Yields - Std/Max K/CMY (pgs)	1.2K-K/1.0K-CMY	1.5K-K/1.0K-CMY	2.5K-K/1.5K-CMY 2.5K-K/2.5K-CMY	700-K/700-CMY 2K-K/1.4K-CMY	2K-K/1K-CMY
	Toner Shipped in Box – K/CMY (pgs)	500/500	500/700	1000/500	700/700	500/500
	Replacement Parts Beyond Toner	CMYK Drum (7K color)	Waste Unit (1.75K color), CMYK Drum (4K color)	OPC Drum and Waste Toner Box (11.25K color), Fuser Unit (50K)	None	None
Features	Control Panel Display	2-line LCD; **3.0" color touch**	2-line LCD	2-Line LCD, Keypad	LCD, Keypad	LCD
	Wireless	N/**Y**	Y	N	N/**Y**	N/**Y**
	Scan-to Destinations	Email, application, File; **Cloud**	USB, Email	USB, Email, PC, FTP	SMB, FTP, Email, USB, Application	Network, Email, USB
	Connectivity	USB 2.0; network; **WiFi**	USB 2.0; Host USB; network; WiFi; NFC	USB 2.0; network; Host USB	USB 2.0; Host USB; Network; **WiFi**	USB; USB 2.0; Network; WiFi
	PDLs Supported	HP PCL 6, HP PCL 5c, PS3, PDF (v1.7)	PCL5C/6, PostScript 3, PDF v1.7, SPL-C	Host-based, GDI	GDI	Host-Based
	Security	Psswd Prot EWS; SNMPv1, 802.11	IP Adrss Filtering, MAC adrss filtering, SNMPv3, IPv6	Network user authentication	MAC adrss filter; port disable; panel lock, Secure EWS access	IPv6
	Warranty	1 yr limited warranty, exchange	1 yr	1 yr	1 Yr Limited, 1 yr exchange	1 Yr Quick Exchange
Eco	ENERGY STAR® Qualified	Yes	Yes	Yes	Yes	Yes
	Annual Power Consumption (TEC kWh)[4]	37.2	79.3	187.9	50.6	INA
Dimensions	Printer Dimensions - WxDxH (in)	16.7x15.8x11.0 **16.7x15.8x13.2**	16x14.3x13.1	16.0x16.9x17.0	16.1x14.9x13.3	16.1x15.3x13.2
	Printer Weight (Lbs)	33/**35**	30.8	41.5	37.4	33

1. HP new product prices are internal street prices in U.S. dollars. Competitor prices are current estimated street price or estimated average private sector price in U.S. dollars from GAP Intelligence dated 8/19/2013. Actual prices may vary.
2. Speeds based on default settings and manufacturer's publications.
3. First page out times from energy-saving mode based on HP internal testing after devices sat in sleep for 60 minutes or per mfg spec sheet as noted.
4. HP results based on internal testing using ENERGY STAR® Typical Electricity Consumption (TEC) methodology. Competitive data obtained from www.energystar.gov in February 2013. All data based on 115V and extended to 1 year. Testing was conducted on a single unit of each product. Actual usage/rate may vary.
5. All other specifications/information gathered from Gap Intelligence or manufacturers' publications.